XVIII. Descriptions of new Asiatic diurnal Lepidoptera By F. Moore, F.Z.S., A.L.S., &c.

[Read July 6th, 1881.]

SATYRINÆ.

Lethe Todara, n. s.

J. Upper side dark olive-brown; both wings without markings. Under side dark vinous-brown; fore wing with a transverse duplex subbasal and an oblique discal waved purple line, a submarginal row of five indistinct small ocelli encircled by a purple border, a marginal narrow purple line, the extreme outer margin being ochreous; hind wing with a transverse discal waved medially angled purple line; six submarginal ocelli encircled by a purple border, the first and fifth large and regularly formed, the second, third, and fourth, and duplex sixth narrow and minutely white-speckled; a narrow marginal purple line and ochreous outer border.

§. Upper side ochreous-brown, dusky externally; fore wing with two ochreous-white, small, ill-defined, subapical spots, and an oblique discal irregular band; hind wing with three submarginal apical black spots, the two lower slightly bordered externally with ochreous-white, above them is an ochreous-white apical spot; marginal line bordered with pale ochreous. Under side paler; markings as in male, but more prominent, and all with paler purple borders; fore wing with an oblique discal ochreous-white band, which extends to the posterior angle, the lower submarginal ocellus obsolete; extreme outer margin of both wings ochreous. Expanse, male 2, female 2, femal

Hab. Nilgiris. In coll. F. Moore.

This species is nearest allied to the Ceylonese *Lethe Drypetis*, Hew.

TANSIMA, n. g.

P. Wings short, broad; fore wing with the costa much arched at the base, apex rounded, exterior margin trans. ent. soc. 1881.—Part III. (sept.) 2 s

very slightly oblique and convex; cell broad; first and second subcostal branches emitted near end of the cell, third trifid; disco-cellulars outwardly oblique, upper bent near the subcostal, concave below, lower slightly concave anteriorly; radials emitted from their angles; hind wing broadly oval, exterior margin convex; cell broadly triangular. Palpi long, slender, pilose beneath; antennæ slender; legs slender, naked.

Tansima Satyrina.

Lethe Satyrina, Butler, Trans. Ent. Soc. Lond., 1871, p. 402.

Hab. Shanghai. In. coll. Godman and Salvin.

Neope Khasiana, n. s.

3. Allied to N. Bhadra. Upper side: markings on fore wing similar, the two streaks within the cell much less distinct, that crossing its middle almost obsolete; the streak between the lower median and submedian narrower, and confluent with its terminal spot; hind wing ochreous-yellow, with the costal border and apical end of exterior border brown, the immediate base of the wing ochreous-brown; a large oval dark brown spot beyond lower end of the cell, and a discal curved series of six round spots decreasing in size to a minute spot above anal angle. Under side similarly marked to N. Bhadra, except that there are two subapical ocelli, the lower one situated between the upper and middle median veins; the three streaks crossing the cell are zigzag, and the posterior margin broadly ochreous; hind wing with a regular transverse subbasal ochreous-white fascia, the dark spot at end of the cell smaller and more prominent, the transverse series of ocelli also smaller, the interspace on both sides paler ochreous-brown. Expanse, $3\frac{1}{4}$ inches.

Hab. Khasia Hills (Austen). In coll. F. Moore.

Callerebia Nada, n. s.

 \mathfrak{Z} and \mathfrak{P} . Nearest to C. Annada. Exterior margins of both wings more convex. Upper side similar, the occllus of fore wing comparatively more rounded. Under side similar; fore wing with the reddish patch somewhat

broader, and extending to below the lower median vein; hind wing with less prominently grey strigæ; the transverse zigzag brown line distinctly formed and more erect, the two subanal ocelli larger and white-pupilled; above these there is an indistinct row of white spots. Expanse, male 2, female $2\frac{1}{2}$ inches.

Hab. Kunawur, N.W. Himalaya (Lang). In coll. F. Moore.

Callerebia Yphthimoides, n. s.

 \Im and \Im . Upper side dark olive-brown; fore wing with a bipupilled ocellus encircled by a narrow indistinct orange-yellow border; hind wing with two small subanal ocelli. Under side numerously covered with grey strigæ; fore wing with ocellus as above, and a slight brownish submarginal and a discal fascia; hind wing with three broader and more distinct transverse fasciæ, a small apical ocellus and four lower, smaller, decreasing ocelli. Expanse, male $1\frac{4}{3}$, female $1\frac{7}{3}$ inch.

Hab. Travancore, Colathoorpolay Patnas, 4000 ft., April (Bourdillon). In coll. F. Moore.

Mydosana, Moore, Trans. Ent. Soc. 1880, p. 170. Mydosana marginata, n. s.

3. Allied to M. patnia (Mycalesis patnia), which also occurs in Sumatra. Fore wing less rounded at the apex; hind wing with more oblique exterior margin; both wings brighter ochreous; fore wing with prominent dark ochreous-black bands on all three sides; lower discal ocellus nearly obliterated by the band; hind wing with a prominent broad outer band, with a large ocellus between middle and lower median veins, and a minute ocellus between the latter and submedian. Under side light ochreous; both wings crossed by two medial slender red lines and a marginal series of ocelli, four and a lower blind minute spot on the fore wing, and seven on the hind wing. Expanse, 15 inch.

Hab. Sumatra. In coll. Henley G. Smith.

NYMPHALINÆ.

Apatura Bhavana, n. s.

3. Allied to A. Ambica. Differs in its larger expanse, the fore wing being more deflexed, and of less breadth

across; the hind wing is also more produced at the anal angle. On the upper side the transverse discal white band is similar, but there are only two small apical white spots, and the exterior border of both wings has an unmarked fulvous-brown fascia. Under side also similar, the nacreous basal and external areas are bluer and are less black bordered, the apical band broader and showing the white spots more in its middle, and the discal fulvous band on the hind wing is narrower. Expanse, 3 inches.

Hab. N.E. Bengal (Russell). In coll. F. Moore.

Herona Sumatrana, n. s.

♀. Upper side brown; fore wing with a purplish bluish white longitudinal subapical streak between the veins, some irregular-shaped discal spots bordered above the posterior angle by lunular spots; hind wing with two outer discal transverse series of similar coloured irregular conical spots, and a marginal series of lunules. Under side brownish ochreous; fore wing with bluish white brown-bordered discoidal streaks, a broad brown-bordered oblique fascia beyond the cell, and three small subapical spots; discal spots as above; hind wing with a brown-bordered transverse medial zigzag line, and an indistinct discal whitish lunular fascia with brownish borders. Expanse, 25 inches.

Hab. Sumatra (Bock). In coll. Henley G. Smith.

Limenitis Bockii, n. s.

3. Upper side vinous-brown, with a broad transverse medial white band, the inner border of which is sharply defined, the outer border traversed by a parallel lunular brown line, terminating at the apical end in three small white spots; both wings with a pale-bordered lunular submarginal and a narrower linear marginal band, both bordered with red at anal angle; fore wing with two discoidal reddish-centred sinuous black streaks, the inner continued beneath the cell. Under side purplish grey, the broad white medial band defined by a slender black inner line and a dark red outer line; fore wing with red costal base, centre of discoidal streaks and apical border dark red, the extreme apex being ochreous; hind wing

with white-centred basal discoidal spots, and dark red anal patch. Expanse, $2\frac{3}{5}$ inches.

Hab. Sumatra (Bock). In coll. Henley G. Smith.

Allied to the N. Indian L. Dudu. Differs in being a much smaller insect, and having a broader white transverse band.

Neptis Anjana, n. s.

J. Upper side very dark olivaceous-brown; fore wing with a slender, but not very prominent, ochreous-brown narrow discoidal streak, a curved discal macular band, a submarginal and a less distinct marginal line; hind wing with a slender transverse subbasal band, a recurved discal band, and narrower but less distinct marginal line. Under side dark chestnut-red; fore wing with the discoidal streak, transverse outer bands glossy purplish blue, the lower part of the discal band being pale ochreous; hind wing with two medial, two discal bands, a very slender marginal glossy purplish blue and a broad paler basal band. Expanse, 2½ inches.

Hab. Moulmein, In coll. F. Moore.

Allied to N. Ananta.

Neptis Kallaura, n. s.

Allied to $N.\ Adipala$. Markings of upper side pale yellow; fore wing with the discoidal streak and its terminal pointed spot more rounded at the edges where divided by the disco-cellular vein; discal series of spots smaller and more oval; hind wing with comparatively narrower inner band and broader outer band. Expanse, male $2\frac{1}{8}$, female $2\frac{3}{8}$ inches.

Hab. Travancore, Kallaur Road, 1200 feet, April; Mynall, 2000 feet (Bourdillon). In coll. F. Moore.

Neptis Carticoides, n. s.

Allied to N. Cartica. Male differs from the same sex of that species in being somewhat smaller and of a fuliginous-brown colour, not black; markings similar, but of a pale fuliginous tint, and therefore less prominent; the subbasal band on the hind wing, and the

lower discal spots on the fore wing only being whitish. Under side of a brighter chestnut colour, and the bands less prominent. Expanse, 2 inches.

Hab. Darjiling. In coll. F. Moore.

Neptis Martabana, n. s.

3. Intermediate between N. Columella and N. Ophiana. From the former it is one-fourth smaller in size. From the Darjiling type of N. Ophiana it differs on the fore wing in having the discoidal streak more distinctly broken near the end, and in there being a wider space between its end and the large conical spot beyond. On the hind wing the subbasal transverse band is somewhat broader, and the submarginal spots smaller, more rounded, and less prominent. Under side of a much darker chestnut purplish brown, the markings showing out much more strongly. Expanse, $2\frac{\pi}{10}$ inches.

Hab. Rangoon. In coll. F. Moore.

Neptis fuliginosa, n. s.

 σ . Allied to N. Ebusa, Felder. Upper side fullginous olive-brown; fore wing with fuliginous olive-white slender discoidal streak, transverse discal interrupted macular band, and two slender submarginal lunular lines; hind wing with a broad subbasal and a discal band, a narrower less distinct slender intervening medial line, and an outer marginal line. Under side paler fuliginous-brown, with markings as above, but more prominent and whiter, the hind wing having also an additional subbasal band. Expanse, $1\frac{\pi}{8}$ inch.

Hab. Moulmein. In coll. India Museum, Calcutta.

Neptis Batara, n. s.

2. Allied to N. Miah of N.E. Bengal. Upper side with similar markings, the discoidal streak being longer and more pointed at the outer end, the discal interrupted macular band slightly broader, the slender marginal line more distinct; the subbasal band on the hind wing broader, and the discal band of the same width as the subbasal is in N. Miah, the outer marginal slender band more distinct. Under side of a paler and duller purplish

chestnut-brown, the bands broader, and of a paler ochreous tint. Expanse, $1\frac{7}{5}$ inch.

Hab. Sumatra (Buckton). In coll. F. Moore.

Rahinda Assamica.

 \mathfrak{F} . Allied to R. Heliodore (Neptis Heliodore), Fabr. Upper side: fore wing with the red discoidal streak similar to that in R. Hordonia, not extending below the cell, the oblique subapical band somewhat narrow, the lower discal band scarcely constricted in its middle; hind wing with a broad subbasal and a discal band, the abdominal margin also broadly of the same red colour as the bands. Under side ochreous-yellow, with very narrow ochreous-brown intervening spaces between the bands. Expanse, $1\frac{3}{4}$ inch.

Hab. Sibsagar, Assam. In coll. India Museum,

Calcutta.

Rahinda Siaka.

∂. Allied to the Javan R. Tiga (Neptis Tiga, Moore, P. Z. S., 1858, p. 4). Fore wing with reddish ochreous discoidal streak completely divided across end of the cell, and its lower margin sharply defined along the median vein; the three transverse discal patches well separated, the apical with a wide interspace, the submarginal formed of separate lunules; hind wing with a straight transverse subbasal (or inner) band, and a narrow submarginal band; marginal line very slender and indistinct. Under side with well defined dark dusky-blackish interspaces between the markings. Expanse, 1½ inch.

Hab. Sumatra (Buckton). In coll. F. Moore.

Rahinda Sattanga.

 $\mathfrak P$. Allied to the Malayan R. Dorelia (Neptis Dorelia, Butler). Upper side blacker, the markings paler, but with more sharply defined markings; fore wing with the discoidal streak entire, the subapical patch of equal width with that beneath it; submarginal band slender and lunular; hind wing with only two bands, both of which are straight, the submarginal band narrow and only half the width of the inner band; no marginal line. Expanse, $1\frac{3}{4}$ inch.

Hab. British Burmah. In coll. F. Moore.

LYCENIDE.

Narathura subfasciata.

3. Near to N. Canuta (Amblypodia Canuta, Hew.). Upper side glossy purplish blue; margins narrowly black. Under side pale greyish brown; fore wing with two very indistinct slightly darker submarginal fasciæ; hind wing with two similar lunular fasciæ, a broader discal zigzag fascia, and three or four small basal spots. Female of a more cobalt-blue tint, which is confined to the lower basal area of both wings. Expanse, 1½ inch.

Hab. Andamans. In coll. Hewitson, British Museum; and Henley G. Smith.

PIERINÆ.

Appias Hippoides.

Near to A. Hippo, typical specimens of which from Sumatra are before me. Upper side similar. Under side of a paler yellow, the apical spot on fore wing more prominently defined; hind wing with the marginal band narrower, and of one-third less in width. In A. Hippo the band reaches the end of the cell; in A. Hippoides it extends only two-thirds towards it. Female, similar above to A. Hippo. Under side: fore wing also similar; hind wing yellowish ochreous, with a well-defined marginal band of the same width as in male. Expanse, male $2\frac{3}{4}$, female $2\frac{1}{4}$ inches.

Hab. N.E. Bengal (Assam, Silhet, Darjiling, Nepal). In coll. F. Moore.

Appias latifasciata.

- 3. Upper side similar to A. taprobana. Under side also similar; apical spot on fore wing yellow; hind wing deep yellow, inclining to chrome; exterior band dense purple-brown, broad, three-eighths of an inch wide, and extending from the outer margin to the cell; a broad dense fascia formed of purple-brown scales from base of subcostal and extending broadly across the middle and over the borders of its two branches, and thus forming a prominent fascia; costal vein also lined with purple-brown scales; the interspace between the lower subcostal and the radial to the outer band almost white.
- ?. Vinous-brown, with olivaceous-white broad subapical streak and discal area; the basal area of hind

wing also broadly olivaceous-white. Under side as in male. Expanse, $2\frac{1}{2}$ inches.

Hab. Carara, Malabar, S. India. In coll. F. Moore. A distinct species from the Bornean A. Enarcte, Boisd.

PAPILIONINÆ.

Papilio Pandiyana.

Allied to P. Jophon. Male: fore wing narrower, with the black streaks between the veins similar to those in P. Diphilus, the pale interspaces being fuliginous and of a less whitish tint than in P. Jophon; hind wing with a broader whitish central patch, the white extending across the whole of the interspace between the veins; submarginal reddish lunules less prominent. Female with the fore wing more rounded externally, the exterior margin being slightly convex; markings as in male. Expanse, male 4, female $4\frac{1}{4}$ inches.

Hab. Travancore (Bourdillon). In coll. F. Moore.

Papilio Tamilana.

Allied to the N. Indian P. Paris. Differs in the fore wing having a shorter transverse fascia, and the hind wing with a larger, longer, and broader blue patch, which extends hindward to the middle median vein. Expanse, $4\frac{1}{4}$ inches.

Hab. Malabar Hills, S. India (Ward). In coll. F. Moore.

HESPERIDÆ.

Hesperia Hiraca.

\$\foats.\$ Allied to \$H.\$ Irava (Hypæpa, Hew.) Differs from same sex of that species in its smaller size. Wings dark brown; fore wing with a broad yellow zigzag spot across middle of the cell, a smaller nearly quadrate discal spot between the upper and middle median veins, and a larger obliquely-quadrate spot between them beneath the middle median. Under side: fore wing with spots as above; a cluster of yellow scales before the apex; hind wing with the medial area speckled with linear yellow scales. Expanse, 2\frac{3}{5} inches.

Hab. Andaman Isles. In coll. Henley G. Smith.